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Liana Chase

OFFICE OF PETITIONS**COMPANY:**

United States Patent and Trademark Office

FAX NO:

571-273-0025

DATE: February 9, 2005

COMMENTS: Re: United States Patent Application No. 10/538,768
Inventor: Bernard Ruchet
Title: Method and Apparatus for Testing Optical Networks
Our File: AP1012USN

Further to your telephone conversation with my assistant, Kathleen, attached is the International Search report, together with a copy of the front page of EP 0 786 878 and WO01/33746.

I look forward to hearing that you have received these documents and that the Petition to Make Special has been granted.

Yours truly,



Thomas Adams
Adams Patent & Trademark Agency

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PCT/CA2004/001552

A. CLASSIFICATION OF SUBJECT MATTER
H04B-10/08, H04B-17/00

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04B-10/08, H04B-17/00, G01N with keywords

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)
Wpil, Delphion, Pluspat, IEEE explore Canadian patent database (optical, measure, monitoring, pon, signal, port, coupler, splitter)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|--------------------------|
| Y | US6,476,919 (Mori et al.) 5 November 2002 Col 14 line 17-line 45 Figure 16 and 19 | 1-5,9-11,12-16 and 20-23 |
| Y | WO01/33746A2 (Ramaswami et al.) 10 May 2001 Figure 19 page 36 line 13-page41 line 2 | 1-5,9-11,12-16 and 20-23 |
| Y | US6,396,575 (Holland) 28 May 2002 Figure 1 Col 3 line 10 -col 4 line 34 | 1-5,9-11,12-16 and 20-23 |
| A | EP0786878 (Cohen et al.) 30 July 1997 Whole document | 1-23 |

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

- * Special categories of cited documents:
 - "A" document defining the general state of the art which is not considered to be of particular relevance
 - "E" earlier application or patent but published on or after the international filing date
 - "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 - "O" document referring to an oral disclosure, use, exhibition or other means
 - "P" document published prior to the international filing date but later than the priority date claimed

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"Y" document member of the same patent family

Date of the actual completion of the international-type search
19 November 2004 (19-11-2004)Date of mailing of the international-type search report
03 December 2004 (03-12-2004)Name and mailing address of the ISA/
Commissioner of Patents
Canadian Patent Office - PCT
Ottawa/Gatineau K1A 0C9
Facsimile No. 1-819-953-9358Authorized officer
Claude Mathieu (819) 997-2163

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
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| Patent Document Cited in Search Report | Publication Date | Patent Family Member(s) | Publication Date |
|--|------------------|---|--|
| US6476919 | 05-11-2002 | JP3457548B2 B2 US6476919 B1 | 20-10-2003 05-11-2002 |
| WO0133746 | 10-05-2001 | AU1360601 A AU3071901 A AU3262201 A AU3634301 A AU3641001 A AU4302201 A CA2389327 A1 CA2389589 A1 CA2389721 A1 CA2389735 A1 CA2389758 A1 CA2389948 A1 EP1226738 A2 EP1228588 A2 EP1228592 A2 EP1228660 A1 EP1228661 A2 EP1228662 A2 US6571030 B1 US6597826 B1 US6650803 B1 US6792174 B1 US6813407 B2 US2004037553 A1 WO0133746 A2 WO0133895 A2 WO0133896 A1 WO0133897 A2 WO0133898 A2 WO0139413 A2 | 14-05-2001 14-05-2001 14-05-2001 14-05-2001 14-05-2001 04-06-2001 10-05-2001 31-05-2001 10-05-2001 10-05-2001 10-05-2001 10-05-2001 10-05-2001 31-07-2002 07-08-2002 07-08-2002 07-08-2003 07-08-2002 07-08-2002 07-08-2002 27-05-2003 22-07-2003 18-11-2003 14-09-2004 02-11-2004 26-02-2004 10-05-2001 10-05-2001 10-05-2001 10-05-2001 10-05-2001 31-05-2001 |
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(51) International Patent Classification⁷: H04B 10/00 (74) Agent: SCHAAL, William, W. et al.; Blakely, Sokoloff, Taylor & Zafman, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025-1026 (US).

(21) International Application Number: PCT/US00/30407 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

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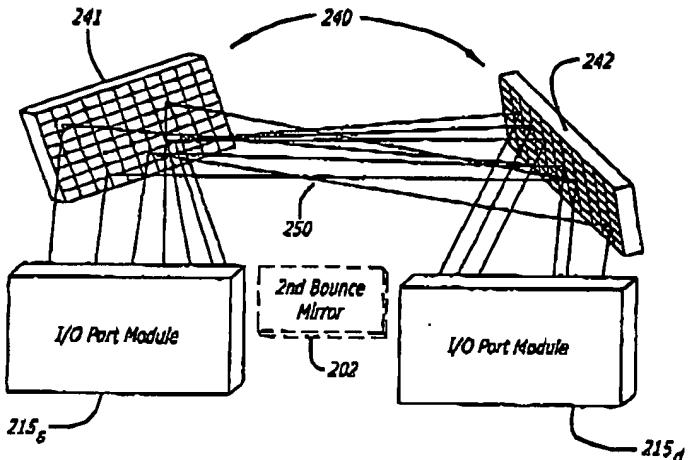
(72) Inventors: RAMASWAMI, Rajiv; 758 Carlisle Way, Sunnyvale, CA 94087 (US). WARD, Robert, R.; 803 Selkirk Place, Sunnyvale, CA 94087 (US).

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— Without international search report and to be republished upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR OPTICAL TO ELECTRICAL TO OPTICAL CONVERSION IN AN OPTICAL CROSS-CONNECT SWITCH



WO 01/33746 A2

(57) Abstract: Methods, apparatus and systems for regenerating, monitoring and bridging optical signals through an optical cross-connect switch to provide increased reliability. A self testing method, apparatus and system for an optical cross-connect switch. An optical-to-electrical-to-optical converter (O/E/O) is provided in an optical cross-connect switch to provide optical-electrical-optical conversion. I/O port cards having an optical-to-electrical-to-optical converter are referred to as smart port cards while I/O port cards without an optical-to-electrical-to-optical converter are referred to as passive port cards. Test port/monitor cards are also provided for testing optical cross-connect switches. Methods, apparatus and systems for performing bridging, test access, and supporting redundant optical switch fabrics are also disclosed.

(19)



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(11) EP 0 786 878 A2

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EUROPEAN PATENT APPLICATION

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(62) Document number(s) of the earlier application(s) in
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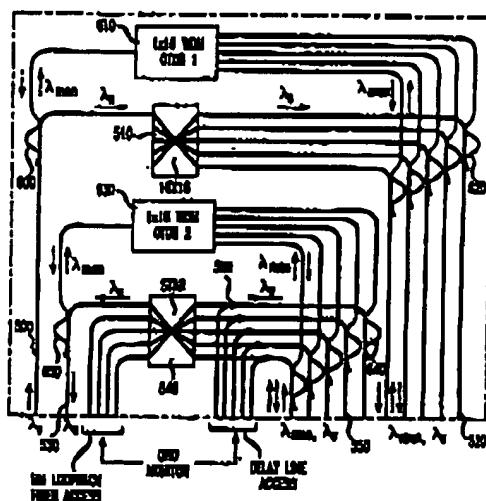
(72) Inventors:

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Berkaley Heights, New Jersey 07922 (US)

(54) Passive optical network

(57) A passive optical network has an input port (500) and a plurality of output ports (520). It responds to input optical signals in a first wavelength region (λ_{mon}) by routing them to respective output ports, depending on their wavelengths (demultiplexing 810). It responds to input optical signals in a second wavelength region λ_s by routing a portion to each of the output ports (star coupling 510).

FIG. 9



EP 0 786 878 A2

